Refine Search

Search Results -

Term	Documents
IMMUNOGLOBULIN	52300
IMMUNOGLOBULINS	28044
EXPRESS	180506
EXPRESSES	74268
POLYCISTRONIC	1582
POLYCISTRONICS	0
(POLYCISTRONIC SAME IMMUNOGLOBULIN SAME EXPRESS).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	3
(IMMUNOGLOBULIN SAME EXPRESS SAME POLYCISTRONIC).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	3

Database:

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L4

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Recall Text

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Interrupt

Search History

DATE: Thursday, December 08, 2005 Printable Copy Create Case

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=ADJ

Set Name side by side	Query	Hit Count	Set Name result set
L4	immunoglobulin same express same polycistronic	3	L4
L3	polycistronic construction same DHFR	1	L3
L2	polycistronic construction same DHFR same IRES	0	L2

L1	polycistronic construction same DHFR same IRES same innunoglobulin	0	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Term	Documents
IMMUNOGLOBULIN	52300
IMMUNOGLOBULINS	28044
EXPRESS	180506
EXPRESSES	74268
POLYCISTRONIC	1582
POLYCISTRONICS	0
(POLYCISTRONIC SAME IMMUNOGLOBULIN SAME EXPRESS).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	3
(IMMUNOGLOBULIN SAME EXPRESS SAME POLYCISTRONIC).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	3

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L4

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Recall Text Clear Interrupt

Search History

DATE: Thursday, December 08, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=ADJ		
L4	immunoglobulin same express same polycistronic	3	L4
L3	polycistronic construction same DHFR	1	L3
L2	polycistronic construction same DHFR same IRES	0	L2

L1	polycistronic construction same DHFR same IRES same innunoglobulin	0	L1

END OF SEARCH HISTORY

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          6836 POLYADENYLATION
             7 POLYADENYLATIONS
          6837 POLYADENYLATION
                 (POLYADENYLATION OR POLYADENYLATIONS)
        560646 SITE
        517174 SITES
        915584 SITE
                 (SITE OR SITES)
          2202 POLYADENYLATION SITE
                 (POLYADENYLATION(W)SITE)
         32256 IMMUNOGLOBULIN
        142960 IMMUNOGLOBULINS
        155038 IMMUNOGLOBULIN
                 (IMMUNOGLOBULIN OR IMMUNOGLOBULINS)
         53671 IG
         14365 IGS
         60855 IG
                 (IG OR IGS)
        178907 IMMUNOGLOBULIN
                 (IMMUNOGLOBULIN OR IG)
L1           0 AN EXPRESSION VECTOR  AND PROMOTER AND CODING SEQUNCE AND POLYAD
               ENYLATION SITE AND IMMUNOGLOBULIN

=> s expression vector and immunoglobulin molecule
        815345 EXPRESSION
         75532 EXPRESSIONS
        873489 EXPRESSION
                 (EXPRESSION OR EXPRESSIONS)
        150009 VECTOR
         93016 VECTORS
        204220 VECTOR
                 (VECTOR OR VECTORS)
         28968 EXPRESSION VECTOR
                 (EXPRESSION(W)VECTOR)
         32256 IMMUNOGLOBULIN
        142960 IMMUNOGLOBULINS
        155038 IMMUNOGLOBULIN
                 (IMMUNOGLOBULIN OR IMMUNOGLOBULINS)
         53671 IG
         14365 IGS
         60855 IG
                 (IG OR IGS)
        178907 IMMUNOGLOBULIN
                 (IMMUNOGLOBULIN OR IG)
         49184 MOLECULE
        149823 MOLECULES
        192230 MOLECULE
                 (MOLECULE OR MOLECULES)
       2290842 MOL
        615825 MOLS
       2625577 MOL
                 (MOL OR MOLS)
       2663575 MOLECULE
                 (MOLECULE OR MOL)
          1156 IMMUNOGLOBULIN MOLECULE
                 (IMMUNOGLOBULIN(W)MOLECULE)
L2          24 EXPRESSION VECTOR AND IMMUNOGLOBULIN MOLECULE

=> dup rem
ENTER L# LIST OR (END):L2
PROCESSING COMPLETED FOR L2
L3            24 DUP REM L2 (0 DUPLICATES REMOVED)

=> d L3 1-24 ibib,abs

L3   ANSWER 1 OF 24  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2004:219829  CAPLUS
DOCUMENT NUMBER:          140:264476
```

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TITLE:                   Bacterial antigen-specific monoclonal antibody fusion
                         proteins for targeted delivery of antimicrobial
                         peptides
INVENTOR(S):             Shi, Wenyuan; Morrison, Sherie L.; Trinh, Kham; Wims,
                         Letitia; Chen, Li; Anderson, Maxwell H.
PATENT ASSIGNEE(S):      USA
SOURCE:                  U.S. Pat. Appl. Publ., 16 pp., Cont.-in-part of U.S.
                         Ser. No. 378,577.
                         CODEN: USXXCO
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  6
PATENT INFORMATION:

     PATENT NO.          KIND    DATE          APPLICATION NO.        DATE
     ---------------     ----    --------      --------------------   --------
     US 2004052814        A1     20040318      US 2001-910358         20010719
     US 6231857           B1     20010515      US 1999-378247         19990820
     US 2003143234        A1     20030731      US 2002-77624          20020214
     CA 2452421           AA     20030130      CA 2002-2452421        20020717
     WO 2003007989        A1     20030130      WO 2002-US22695        20020717
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
     EP 1414495           A1     20040506      EP 2002-752402          20020717
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
     JP 2004538283        T2     20041224      JP 2003-513594          20020717
     US 2004137482        A1     20040715      US 2003-706391          20031112
PRIORITY APPLN. INFO.:                         US 1998-102179P      P  19980928
                                               US 1999-378577      A2  19990820
                                               US 2001-910358      A2  20010719
                                               US 2002-77624       A   20020214
                                               WO 2002-US22695     W   20020717
AB   Microbial infection may be treated by administration of a fusion protein
     comprising one or more recognition sequences and at least one
     antimicrobial peptide.  In preferred embodiments, a linker peptide
     connects the recognition sequence and one or more antimicrobial peptides.
     The recognition sequence may be an Ig mol., or
     fragment thereof, that specifically binds to a target antigen present on a
     pathogen.  The recognition sequence may also be a non-immunol.
     polypeptide, providing that the polypeptide binds specifically to a
     particular ligand.  In presently preferred embodiments the recognition
     sequence is monoclonal antibody, such as SWLA3 heavy chain variable
     region, that binds specifically to S. mutans and the antimicrobial
     peptides are derivs. of histatin, such as histatin 5 or dhvar 1, are
     inserted into a IgG1 expression vector to produce
     targeting specific chimeric antibodies.

L3   ANSWER 2 OF 24   CAPLUS   COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:        2004:142699   CAPLUS
DOCUMENT NUMBER:         140:180140
TITLE:                   Immunoglobulin DNA cassette molecules, monobody
                         constructs for adapting antibody variable regions, and
                         methods of production and use of antibody library
                         preparation
INVENTOR(S):             O'Keefe, Theresa L.; Healey, Judith Jacques; Newman,
                         Walter; Ponath, Paul D.; Keyt, Bruce A.
PATENT ASSIGNEE(S):      Millennium Pharmaceuticals, Inc., USA
SOURCE:                  U.S. Pat. Appl. Publ., 84 pp.
```

CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004033561	A1	20040219	US 2002-272899	20021017
US 2004151721	A1	20040805	US 2003-733563	20031210
WO 2005060368	A2	20050707	WO 2003-US39599	20031210

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
US 2001-350166P P 20011019
US 2002-392364P P 20020626
US 2002-272899 A2 20021017

AB Featured are DNA mols., **expression vectors**, and host cells useful for creation of Igs, as well as novel **Ig mols**. termed monobodies. Addnl. provided are methods of production of Igs, including monobodies, as well as methods of using the disclosed Ig and monobody constructs, **expression vectors** and host cells containing DNA encoding mols. for production of Ig and monobody proteins. The Ig monobody cassette preferably comprises coding sequences for an Ig leader sequence operably linked to a stable Ig hinge and constant domain regions of either heavy or light chain from either human, or mouse, or Macaque, which is regulated by a transcriptional promoter or polyA signal. Also disclosed and claimed are DNA coding sequences for a dozen leader peptides. In a preferred embodiment, a monobody vector comprises, an extended light chain and a heavy chain monobody cassette, wherein the light chain cassette contains an Ig C kappa domain attached via a linker sequence to an IgG3 hinge and IgG1 CH2 and CH3 constant regions; and wherein the heavy chain cassette contains a IgG3 hinge and IgG3 CHI domains linked to IgG1 CH2 and CH3 regions. These vectors are made for the insertion of coding regions of Ig variable regions for the preparation of antibody library for further selection and use.

L3 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:476385 CAPLUS
DOCUMENT NUMBER: 143:344841
TITLE: Molecular cloning and expression of the fp25k gene of HaSNPV in E. coli and preparation of its antiserum
AUTHOR(S): Wu, Dong; Deng, Fei; Hu, Zhihong; Yuan, Li; Sun, Xiulian
CORPORATE SOURCE: Wuhan Institute of Virology, Chinese Academy of Sciences, Wuhan, Hubei Province, 430071, Peop. Rep. China
SOURCE: Zhongguo Bingduxue (2004), 19(4), 380-384
CODEN: ZBINER; ISSN: 1003-5125
PUBLISHER: Kexue Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB The PCR product of Helicoverpa armigera single nucleocapsid nucleopolyhedrovirus HaSNPV fp25k gene was cloned into a prokaryotic **expression vector** pProEXHTb. After inducing with IPTG, the fp25k gene was successfully expressed in E. coli DH5α. The expression product was 32 kDa. This protein was purified and injected into rabbit to raise polyclonal antiserum. Western blot anal. using this antiserum showed the specific reaction to FP25K protein expressed in both prokaryotic with GST fusion and viral infected insect cells. The antibody made it possible to anal. the function this protein in infected insect

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     cells.

L3   ANSWER 4 OF 24  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2002:555637  CAPLUS
DOCUMENT NUMBER:          137:89451
TITLE:                    Bifunctional fusion proteins comprising immunoglobulin
                          and glucocerebrosidase activity and uses for treatment
                          of glycolipid storage disorders
INVENTOR(S):              Schumacher, Silke; Gillies, Stephen
PATENT ASSIGNEE(S):       Merck Patent G.m.b.H., Germany
SOURCE:                   PCT Int. Appl., 25 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
     WO 2002057435        A2    20020725    WO 2001-EP15328        20011227
     WO 2002057435        A3    20031224
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
             US, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
             GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,
             GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2435037           AA    20020725    CA 2001-2435037         20011227
     BR 2001016803        A     20040217    BR 2001-16803           20011227
     EP 1392826           A2    20040303    EP 2001-989057          20011227
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2004525621        T2    20040826    JP 2002-558488          20011227
     NO 2003003247        A     20030717    NO 2003-3247            20030717
     US 2004043457        A1    20040304    US 2003-466593          20030717
     ZA 2003006333        A     20041117    ZA 2003-6333            20030814
PRIORITY APPLN. INFO.:                      EP 2001-101056      A  20010118
                                            WO 2001-EP15328     W  20011227
AB   The present invention relates to novel glucocerebrosidase bifunctional
     fusion proteins consisting essentially of an Ig (Ig) mol
     . and a protein having the biol. activity of glucocerebrosidase, for
     enzyme replacement therapy and/or augmentation of glycolipid metabolism by the
     administration of bifunctional fusion proteins using a therapy based on
     the treatment of glycolipid storage disorders such as Gaucher's, Fabry's
     and Tay-Sachs diseases.  The invention further provides expression
     vectors comprising the fusion protein, and host cells transfected
     with the vectors.

L3   ANSWER 5 OF 24  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2002:638127  CAPLUS
DOCUMENT NUMBER:          137:180787
TITLE:                    Gene transfer in chicken bursal stem cells for
                          reconstitution of bursal follicles in chicken to
                          produce recombinant protein in egg yolk
INVENTOR(S):              Neiman, Paul E.
PATENT ASSIGNEE(S):       Fred Hutchinson Cancer Research Center, USA
SOURCE:                   U.S. Pat. Appl. Publ., 20 pp.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
     US 2002114790        A1    20020822    US 2001-25199          20011218
     US 6946266           B2    20050920
PRIORITY APPLN. INFO.:                      US 2000-257142P     P  20001220
AB   The invention relates to a method of expressing proteins in higher
     eukaryotes in vitro.  In general, the invention sets forth a method of
     expressing exogenous proteins as fusion partners with the Ig
     mols. of avian species specifically chickens.  The technol.
     involves, in one embodiment, retroviral-mediated gene transfer and
     transplantation of stem cells from the Bursa of Fabricus in chickens.  The
     basic constructs to express proteins of the interest as the fusion
     proteins with a avian diversified Ig light chains at the hinge region with
     His6-tagged at the C-terminus are provided.  Methods of constructing
     various expression vectors and preparing the recombinant
     retroviruses in animal cells for stem cell transduction are described.  An
     anti-apoptotic NR-13 gene is also infused i.v. into recipients with the
     transgene since it can block stem cell elimination without causing
     transformation.  An exemplary serial transplantation method to prepare
     chickens with reconstituted chicken bursal follicles from embryonic donor
     cells includes ablation of the endogenous lymphoid population of recipient
     embryonic bursas, repopulation of ablated follicles, harvesting follicle
     cells after the hatching, and production bursas from transplanted
     gene-modified B-cells.

L3   ANSWER 6 OF 24  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2002:107921  CAPLUS
DOCUMENT NUMBER:          136:166064
TITLE:                    Human monoclonal antibodies specific for hepatitis C
                          virus (HCV) E2 antigen
INVENTOR(S):              Persson, Mats Axel Atterdag; Allander, Tobias Erik
PATENT ASSIGNEE(S):       Karolinska Innovations AB, Swed.
SOURCE:                   U.S. Pat. Appl. Publ., 38 pp., Cont.-in-part of U.S.
                          Ser. No. 635,109.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
     US 2002016445        A1    20020207    US 1997-844215         19970417
     US 6747136           B2    20040608
     US 6538114           B1    20030325    US 1996-635109         19960419
     CA 2262423           AA    19971030    CA 1997-2262423        19970418
     WO 9740176           A1    19971030    WO 1997-EP1977         19970418
         W:  CA, JP
         RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     EP 937153            A1    19990825    EP 1997-920721         19970418
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
PRIORITY APPLN. INFO.:                      US 1996-635109      A2 19960419
                                            US 1997-844215      A  19970417
                                            WO 1997-EP1977      W  19970418
AB   The present invention relates to compns. derived from Ig.
     mols. specific for the hepatitis C virus (HCV).  More
     particularly, the invention is related to mols. which are capable of
     specifically binding with HCV E2 antigen.  The mols. are useful in
     specific binding assays, affinity purification schemes and pharmaceutical
     compns. for the prevention and treatment of HCV infection in mammalian
     subjects.  The invention thus relates to novel human monoclonal antibodies
     specific for HCV E2 antigen, fragments of such monoclonal antibodies,
     polypeptides having structure and function substantially homologous to
     antigen-binding sites obtained from such monoclonal antibodies, nucleic
     acid mols. encoding those polypeptides, and expression
     vectors comprising the nucleic acid mols.
REFERENCE COUNT:          19    THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
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L3   ANSWER 7 OF 24  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2001:191510  CAPLUS
DOCUMENT NUMBER:          135:4299
TITLE:                    Human and murine immunoglobulin expression
                          vector cassettes
AUTHOR(S):                McLean, G. R.; Nakouzi, A.; Casadevall, A.; Green, N.
                          S.
CORPORATE SOURCE:         Department of Cell Biology, Albert Einstein College of
                          Medicine, Bronx, NY, 10461, USA
SOURCE:                   Molecular Immunology (2001), Volume Date 2000, 37(14),
                          837-845
                          CODEN: MOIMD5; ISSN: 0161-5890
PUBLISHER:                Elsevier Science Ltd.
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
AB   The authors describe the construction of new Ig expression
     vectors and their use in the production of recombinant chimeric
     Ig mols. in transfected mammalian cells.  The vectors
     contain the cDNA encoding the constant regions of human (μ, α1,
     γ1, γ2, γ3, γ4, κ) and murine (μ,
     γ2a, κ) Ig heavy and light chains.  Unique restriction sites
     flanking the Ig variable region allow for replacement of variable regions
     generated by PCR.  The CMV promoter allows for the transfection and
     expression of Ig in non-lymphoid cells.  Distinct drug selection markers
     for heavy chain and light chain expression vectors
     allows for sequential or co-transfection of the vectors.  The authors show
     that secretion of recombinant Ig can reach 1.2 μg/mL per million cells
     per day for transfected B cells.  Replacement of the variable region
     results in the production of functional Ig retaining antigen specificity.
REFERENCE COUNT:          20    THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3   ANSWER 8 OF 24  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2001:828532  CAPLUS
DOCUMENT NUMBER:          136:351110
TITLE:                    Molecular cloning of MUC1/Y and soluble expression of
                          its extra-cellular fragment in E. coli
AUTHOR(S):                Zhang, Li-xin; Li, Chun-hai; Sun, Li-ya
CORPORATE SOURCE:         Department of Tumor Molecular Biology, Beijing North
                          Taiping Hospital, Beijing Institute of Basic Medical
                          Sciences, Beijing, 100039, Peop. Rep. China
SOURCE:                   Zhongguo Shengwu Huaxue Yu Fenzi Shengwu Xuebao
                          (2001), 17(5), 579-584
                          CODEN: ZSHXF2; ISSN: 1007-7626
PUBLISHER:                Zhongguo Shengwu Huaxue Yu Fenzi Shengwu Xuebao
                          Bianweihui
DOCUMENT TYPE:            Journal
LANGUAGE:                 Chinese
AB   MUC1/Y cDNA was amplified by RT-PCR from HeLa cells and cloned into pGEM-T
     for sequence anal.  MUC1/Y extra-cellular fragment (MUC1/Yex) was then
     amplified by PCR and cloned into pGEX-2T fusion expression
     vector.  E. coli DHS5α was transformed with the new
     constructed expression vector pGEX-Yex and induced by
     IPTG.  The fusion protein GST-Yex was purified by affinity column and
     identified by thrombin. digestion, GST activity and N-terminal protein
     sequencing.  Polyclonal antibody was prepared by-immunizing rabbits and the
     titer of the antibody generated was determined to be 1:250 000 by ELISA.  The
     results showed that the open reading frame (ORF) of MUC1/Y cDNA from HeLa
     cells consisted of 759 bp with a 9 bp deletion in its signal
     peptide-coding region and a G to A transition at the position of 331 bp,
     which caused a V to M amino acid mutation (GenBank access number AF125525).
     The expressed fusion protein GST-Tex with a mol. weight of 40 kD accounted
     for 25%-30% of total host proteins.  70%-80% Of the GST-Yex proteins
     existed as soluble ones and the purity of GST-Yex was over 90% with 0.21 U/pg
     GST activity after one-step affinity purification  MUC1/Yex protein can be
     cleaved from GST-Yex and N-terminal protein sequencing confirmed that is
     was consistent with the sequence. published.
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L3 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:23852 CAPLUS
DOCUMENT NUMBER: 134:235811
TITLE: Baculovirus expression cassette vectors for rapid production of complete human IgG from phage display selected antibody fragments
AUTHOR(S): Liang, M.; Dubel, S.; Li, D.; Queitsch, I.; Li, W.; Bautz, E. K. F.
CORPORATE SOURCE: Institute of Virology, Chinese Academy of Preventive Medicines, Beijing, 100052, Peop. Rep. China
SOURCE: Journal of Immunological Methods (2001), 247(1-2), 119-130
CODEN: JIMMBG; ISSN: 0022-1759
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB For the expression of human intact IgG antibodies, the authors have constructed a set of baculovirus **expression vectors** designed to facilitate rapid insertion of heavy and light chain genes of Fab or scFv antibodies derived from phage display antibody libraries. By linking them to human constant or Fc regions, expression of complete human **Ig mols**. was achieved in insect cells by infection with recombinant baculovirus. The IgG expression cassette vectors are based on the backbone vector which contains two back to back polyhedron and p10 promoters. The IgG expression cassette elements, including the authentic IgG lambda or kappa and heavy chain signal sequences, as well as light chain (lambda or kappa) and heavy chain constant region genes are combined in a single vector and are controlled by the p10 and polyhedron promoter resp. Either of VL or Fab-L and VH or Fab-Fd genes from common phage display systems can be directly inserted into one of the cassette vectors through in-frame cloning sites. This design of a single cassette vector combining heavy and light chain expression elements allowed rapid production and secretion of correctly processed and assembled intact Igs from recombinant baculovirus infected insect cells. The recombinant antibodies showed the expected mol. size of the H2L2 heterodimer in non reducing SDS-PAGE. No apparent differences were found between the expression level of heavy and light chains, and antigen binding function was preserved. For various antibodies, yields between 6 and 18 mg/L IgG were obtained.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:27557 CAPLUS
DOCUMENT NUMBER: 135:221991
TITLE: Using swine self IgG H chain as a carrier to construct an recombinant vaccine against type O foot-and-mouth disease virus infection
AUTHOR(S): Zhao, Kai; Chen, Guang-hui; Zhang, Zhen-yu; Yan, Wei-yao; Zheng, Zhao-xin
CORPORATE SOURCE: State Key Lab. of Genetic Engineering, School of Life Science, Fudan University, Shanghai, 200433, Peop. Rep. China
SOURCE: Shengwu Gongcheng Xuebao (2000), 16(6), 679-683
CODEN: SGXUED; ISSN: 1000-3061
PUBLISHER: Kexue Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB It is a new approach to use self **Ig mol**. as carriers for the foreign epitopes to prepare for effective and safe vaccines. Recombinant vaccine study on foot-and-mouth disease virus proved that the fusion protein containing a 3-galactosidase from E. coli and the two copies of amino acid residue 141.apprx.160 and one copy of amino acid residue 200.apprx.213 of FMDV type O elicited high levels of neutralizing antibody and protected both guinea pigs and swine against viral challenge. In this study using swine self IgG H chain as a carrier protein to construct a recombinant vaccine against FMDV type O. Firstly, the CDR3 region of the V-region of swine IgG H chain was deleted by PCR techniques. Secondly,the partial V-region and FR4-C-region were cloned into pBluescript II SK(+) and pBluescript II KS(+) resp. Thirdly, a tandem repeat nucleotide fragment encoded 20AA.apprx.14AA.apprx.20AA of VP1 of FMDV O Type was ligated at the 3' end of partial V-region. Finally,partial V-region 20AA.apprx.14AA.apprx.20AA and FR4-C-region were cut and isolated resp., and ligated into prokaryotic **expression vector** pET28b. Desired recombinants were obtained by restriction endonucleases and partial sequence anal. and termed pET28b-FH. A 64 kD protein was expressed in E. coli. Western blot and ELISA assay showed that the immunogenicity of expressed fusion protein was pos. Guinea pigs were i.m. inoculated with 200 μg of pET28b-FH fusion protein at two weeks intervals for two times. 66% Of guinea pigs were protected against FMDV Type O infection. Swines were i.m. inoculated with 1.5 mg of pET28b-FH fusion protein at two weeks intervals for two times, and the symptom had been postponed for six days compared with the control.

L3 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:850399 CAPLUS
DOCUMENT NUMBER: 135:32520
TITLE: CHO expression of a novel human recombinant IgG1 anti-RhD antibody isolated by phage display
AUTHOR(S): Miescher, Sylvia; Zahn-Zabal, Monique; De Jesus, Maria; Moudry, Radmila; Fisch, Igor; Vogel, Monique; Kobr, Michel; Imboden, Martin A.; Kragten, Eddy; Bichler, Johann; Mermod, Nicolas; Stadler, Beda M.; Amstutz, Hanspeter; Wurm, Florian
CORPORATE SOURCE: ZLB Central Laboratory, Swiss Red Cross and Institute of Immunology and Allergy. Inselspital, Bern, CH-3010, Switz.
SOURCE: British Journal of Haematology (2000), 111(1), 157-166
CODEN: BJHEAL; ISSN: 0007-1048
PUBLISHER: Blackwell Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Replacement of the hyperimmune anti-Rhesus (Rh) D Ig, currently used to prevent hemolytic disease of the newborn, by fully recombinant human anti-RhD antibodies would solve the current logistic problems associated with supply and demand. The combination of phage display repertoire cloning with precise selection procedures enables isolation of specific genes that can then be inserted into mammalian expression systems allowing production of large quantities of recombinant human proteins. With the aim of selecting high-affinity anti-RhD antibodies, two human Fab libraries were constructured from a hyperimmune donor. Use of a new phage panning procedure involving bromelin-treated red blood cells enabled the isolation of two high-affinity Fab-expressing phage clones. LD-6-3 and LD-6-33, specific for RhD. These showed a novel reaction pattern by recognizing the D variants DIII, DIVa, DIVb, DVa, DVI types I and II, DVII, Rh33 and DFR. Full-length **Ig mols**. were constructed by cloning the variable regions into **expression vectors** containing genomic DNA encoding the Ig constant regions. We describe the first, stable, suspension growth-adapted Chinese hamster ovary (CHO) cell line producing a high affinity recombinant human IgG1 anti-RhD antibody adapted to pilot-scale production Evaluation of the Fc region of this recombinant antibody by either chemiluminescence or antibody-dependent cell cytotoxicity (ADCC) assays demonstrated macrophage activation and lysis of red blood cells by human lymphocytes. A consistent source of recombinant human anti-RhD Ig produced by CHO cells is expected to meet the stringent safety and regulatory requirements for prophylactic application.

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:554906 CAPLUS
DOCUMENT NUMBER: 125:193468
TITLE: Modified immunoglobulins carrying foreign antigenic domains and activation of T-cells using them
INVENTOR(S): Sandlie, Inger; Bogen, Bjarne
PATENT ASSIGNEE(S): Armitage, Ian, M., UK

SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

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     PATENT NO.          KIND   DATE       APPLICATION NO.       DATE
     ---------------     ----   --------   --------------------  --------
     WO 9622377           A1    19960725   WO 1996-GB116         19960119
         W:  AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
             ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT,
             LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
             SG, SI
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE,
             IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE
     CA 2210997           AA    19960725   CA 1996-2210997       19960119
     AU 9644538           A1    19960807   AU 1996-44538         19960119
     AU 690802            B2    19980430
     EP 804597            A1    19971105   EP 1996-900630        19960119
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
     JP 10513346          T2    19981222   JP 1996-522130        19960119
     US 6294654           B1    20010925   US 1997-860904        19970929
PRIORITY APPLN. INFO.:                     GB 1995-1079       A  19950119
                                           WO 1996-GB116      W  19960119
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AB Modified **Ig mols**. carrying antigenic peptides, e.g. from a ras protein, in regions outside the CDR loops are described for use in presentation of the antigenic peptide. The antigenic peptide is incorporated into the constant region of a light or heavy chain, but the site of incorporation must be chosen to prevent disruption of the higher-order structures of the Ig. The antigen binding site of the Ig preferably recognizes dendritic antigen presenting cells (APCs). The modified Ig can be taken up by dendritic APCs and the antigenic peptide presented on MHC II to naive T-helper cells which stimulate cytotoxic T-cells via the production inter alia of IL-2. These modified Igs can be used to stimulate an immune system that has apparently become tolerant of a mutant protein, e.g. in the case of certain types of cancer, or it could be used for vaccination against viral infections. The modified Ig can be expressed from recombinant host cells from which it is secreted, notwithstanding the presence of the foreign peptide in a loop of the mol. The preparation of genes for an IgG3 heavy chain carrying peptides from an antibody to dinitrophenol and successful secretory expression of the genes with formation of the mature Ig protein is demonstrated.

L3 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:178446 CAPLUS
DOCUMENT NUMBER: 124:257959
TITLE: Rapid and reliable cloning of antibody variable regions and generation of recombinant single chain antibody fragments
AUTHOR(S): Gilliland, L. K.; Norris, N. A.; Marquardt, H.; Tsu, T. T.; Hayden, M. S.; Neubauer, M. G.; Yelton, D. E.; Mittler, R. S.; Ledbetter, J. A.
CORPORATE SOURCE: Bristol-Myers Squibb Pharmaceutical Research Institute, Seattle, WA, USA
SOURCE: Tissue Antigens (1996), 47(1), 1-20
CODEN: TSANA2; ISSN: 0001-2815
PUBLISHER: Munksgaard
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Single chain antibody variable region fragments (sFv), by virtue of their size and method of construction are potentially useful as therapeutic reagents and as tools for exploring cell surface receptor function. The sFv offer several advantages over the intact **Ig mol**.
For instance, they are expressed from a single transcript and can be molecularly linked to other proteins to generate bispecific sFv mols. or single-chain immunotoxins. The relatively small size of sFv is an advantage in allowing for easier penetrance into tissue spaces, and their

clearance rate is exceedingly rapid. The sFv are useful for gene therapy since they can be directed to a specific cellular localization and can be fused to retroviral env genes to control viral host range. To prepare sFv to murine and human leukocyte CD antigens, the authors devised a method for rapid cloning and expression that can yield functional protein within 2-3 wk of RNA isolation from hybridoma cells. The variable regions were cloned by poly-G tailing the first strand cDNA followed by anchor PCR with a forward poly-C anchor primer and a reverse primer specific for constant region sequence. Both primers contain flanking restriction sites for insertion into PUC19. Sets of PCR primers for isolation of murine, hamster and rat VL and VH genes were generated. Following determination of consensus sequences for a specific VL and VH pair, the VL and VH genes were linked by DNA encoding an intervening peptide linker [usually (Gly4Ser)3] and the VL-link-VH gene cassettes were transferred into the pCDM8 mammalian **expression vector**. The constructs were transfected into COS cells and sFvs were recovered from spent culture supernatant. The authors have used this method to generate functional sFv to human CD2, CD3, CD4, CD8, CD28, CD40, CD45 and to murine CD3 and gp39, from hybridomas producing murine, rat, or hamster antibodies. Initially, the sFvs were expressed as fusion proteins with the hinge-CH2-CH3 domains of human IgG1 to facilitate rapid characterization and purification using goat anti-human IgG reagents or protein A. The authors also found that active sFv could be expressed with a small peptide ≥tag≥ or in a tail-less form. Expression of CD3 (G19-4) sFv tail-less or Ig tailed forms demonstrated increased cellular signaling activity and suggested that sFv have potential for activating receptors.

L3 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:	1995:435237 CAPLUS
DOCUMENT NUMBER:	123:167605
TITLE:	Molecular cloning of a cDNA clone encoding a phosphoprotein component related to the Ig receptor-mediated signal transduction
AUTHOR(S):	Inui, Seiji; Kuwahara, Kazuhiko; Mizutani, Jyunichi; Maeda, Kazuhiko; Kawai, Taro; Nakayasu, Hiroyuki; Sakaguchi, Nobuo
CORPORATE SOURCE:	Fac. Med., Tottori Univ., Yonago, Japan
SOURCE:	Journal of Immunology (1995), 154(6), 2714-23 CODEN: JOIMA3; ISSN: 0022-1767
PUBLISHER:	American Association of Immunologists
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB We have shown previously that a 52-kDa phosphoprotein (p52) co-precipitated with Ig receptor (IgR)-associated MB-1 protein was inducibly phosphorylated by the stimulation with 12-O-tetradecanoyl-phorbol-13-acetate. By immunizing the 52-kDa protein co-precipitated with MB-1, we prepared a mAb (19-14), which can immunoppt. the p52 and the associated kinase mol. Immune complex kinase assay with the 19-14 mAb showed that the p52 is associated with a novel kinase mol. and is involved in IgR-mediated signal transduction. Here we isolated a cDNA clone (α4) from a murine bone marrow cDNA library in λgt-11 vector by the 19-14 mAb. The α4 cDNA encodes a novel protein of 340 amino acids with multiple potential phosphorylation sites. The 1.4-kb α4 mRNA is expressed in various cells including cell lines of B lineage, T lineage, monocytic, fibroblast, and normal organs such as liver, spleen, thymus, and brain. To study the mol. encoded by the α4 cDNA, we produced a chimeric protein of the glutathione S-transferase (GST)-α4 in pGEX-3X **expression vector**. The 19-14 mAb binds to the GST-α4 fusion protein. Rabbit anti-α4 Ab prepared by immunizing the GST-α4 fusion protein immunopptd. a 52-kDa phosphorpotein from WEHI-231 cells. The 52-kDa phosphoprotein immunopptd. by the anti-α4 Ab is tightly associated with kinase activity that is similarly observed with the p52 protein reported previously. Moreover, the 52-kDa phosphoprotein from WEHI-231 cells. The 52-kDa phosphoprotein immunopptd. by the anti-α4 Ab is tightly associated with kinase activity that is similarly observed with the p52 protein reported previously. Moreover, the 52-kDa phosphoprotein immunopptd. with the anti-α4 Ab is identical to the p52 by the protein comparison on nonequil. pH gradient gel electrophoresis/SDS-PAGE, isoelec. focusing/SDS-PAGE, and V8 protease mapping. The 52-kDa phosphoprotein is associated with functional components that are inducibly phosphorylated by anti-IgM stimulation. These results suggested that the α4 gene-encoded mol. is functionally involved in the IgR-mediated signal transduction in B cells.

L3 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:495969 CAPLUS
DOCUMENT NUMBER: 122:263106
TITLE: Interplay between the human TCR/CD3ε and the B-cell antigen receptor associated Ig-β (B29)
AUTHOR(S): Mueller, Brigitte; Cooper, Laura; Terhorst, Cox
CORPORATE SOURCE: Division of Immunology, Beth Israel Hospital, Harvard Medical School, Boston, MA, 02115, USA
SOURCE: Immunology Letters (1995), 44(2,3), 97-103
CODEN: IMLED6; ISSN: 0165-2478
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB T and B lymphocytes are characterized by the surface expression of highly variable antigen receptors called the T-cell (TCR) and B-cell (BCR) receptor. In both B and T cells, binding of antigen to their resp. surface receptors results in transmembrane signaling which leads either to programmed cell death or to proliferation and differentiation. The human and murine TCR consist of the highly variable TCR α and β or γ and δ chains recognizing antigen and the non-covalently associated invariable CD3 complex (γ, δ, ε) and ζ. The antigen-recognizing surface membrane-bound **Ig mols**. on the surface of human and murine B cells are non-covalently associated with a heterodimeric protein complex of Ig-α (MB-1) and Ig-β (B29). Like the CD3 complex associated with TCR the Ig-associated proteins are predicted to regulate the assembly and transport of the Ig complex to the cell surface and to couple membrane-bound Ig to intracellular signal transduction pathways. To gain more insight into structure/function relationships between CD3 proteins and Ig-α and Ig-β, the authors transiently co-transfected pairs of **expression vectors** encoding either TCR/CD3 chains on the one hand and Ig-α or Ig-β on the other into Cos cells. Thus the authors found a very strong interaction between CD3ε and Ig-β mediated by the extracellular domains. Expts. in which the authors could stain Jurkat T cells with soluble Ig-β but not Ig-α protein indicated the recognition of CD3ε by Ig-β even in the context of the whole TCR/CD3 complex. The staining of Jurkat cells by soluble Ig-β protein could specifically be inhibited by blocking the extracellular domains of either CD3ε or Ig-β with antibodies. These data hint at a possible function for CD3ε and Ig-β in constituting a novel pair of surface mols. involved in T-/B-cell interactions.

L3 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1994:506518 CAPLUS
DOCUMENT NUMBER: 121:106518
TITLE: Minimal antibodies including the light and heavy chain variable regions in a single polypeptide
INVENTOR(S): Wu, Anna M.
PATENT ASSIGNEE(S): City of Hope, USA
SOURCE: PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9409817	A1	19940511	WO 1992-US9347	19921104

W: CA, DE, GB, JP, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE

CA 2126967	AA	19940511	CA 1992-2126967	19921104
EP 627932	A1	19941214	EP 1992-924181	19921104
EP 627932	B1	20020508		
R: DE, FR, GB				
US 5837821	A	19981117	US 1994-256156	19940624
PRIORITY APPLN. INFO.:			WO 1992-US9347	19921104

AB An antigen-binding protein construct or "minibody" that includes the VLand VH domains of a native antibody fused to the hinge region and CH3 domain of the **Ig mol**. is described. Minibodies are small versions of whole antibodies which encode in a single chain the essential elements of a whole antibody. Minibodies are manufactured by host cells transformed with minibody genes and are useful in therapeutics and in imaging agents. The construction of the gene for an IgG-based minibody against carcinoembryonic antigen and its expression in Escherichia coli using the **expression vector** pKKtac is described. Induced cells demonstrated a CEA-binding activity absent from control cells. The protein appeared to associate into dimers.

L3 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:234829 CAPLUS
DOCUMENT NUMBER: 122:7972
TITLE: Chimeric ligand/**immunoglobulin molecules** and their uses
INVENTOR(S): Landolfi, Nicholas F.
PATENT ASSIGNEE(S): Protein Design Labs, Inc., USA
SOURCE: U.S., 13 pp. Cont. of U.S. Ser. No.532,276, abandoned. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5349053	A	19940920	US 1993-76263	19930610
PRIORITY APPLN. INFO.:			US 1990-532267 B1	19900601

AB Chimeric mols. having a ligand component linked to an Ig constant region component are provided for various diagnostic, therapeutic and other uses. These immunoligands can exhibit the high degree of specificity associated with the ligand, yet retain various effector functions characteristic of Ig heavy chains. In example, an **expression vector** (pIL-2/IgG1) that contains the coding sequence of human IL-2 upstream of four exons encoding the human IgG1 heavy chain (CH1, hinge, CH2, CH3) was constructed, and the immunoligand was isolated and its antibody-dependent cell cytotoxicity was characterized.

L3 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1994:104471 CAPLUS
DOCUMENT NUMBER: 120:104471
TITLE: Dual role of the tyrosine activation motif of the Ig-α protein during signal transduction via the B cell antigen receptor
AUTHOR(S): Flaswinkel, Heinrich; Reth, Michael
CORPORATE SOURCE: Max-Planck-Inst. Immunobiol., Freiburg, D-79108, Germany
SOURCE: EMBO Journal (1994), 13(1), 83-9 CODEN: EMJODG; ISSN: 0261-4189
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The B cell antigen receptor (BCR) is a multimeric protein complex consisting of the ligand binding **Ig mol**. and the Ig-α/β heterodimer that mediates intracellular signaling by coupling the receptor to protein tyrosine kinases (PTKs). Transfection of the Ig-α deficient myeloma cell line J558Lμm with **expression vectors** coding for mutated Ig-α allowed the authors to test the function of the tyrosines in the cytoplasmic region of Ig-α in the context of the BCR. Furthermore the authors expressed Ig-α mutations as chimeric CD8-Ig-α mols. on K46 B lymphoma cells and tested their signaling capacity in terms of PTK activation and release of calcium. The authors show here that the conserved tyrosine residues in the cytoplasmic portion of Ig-α have a dual role. First, they are required for efficient activation of PTKs during signal induction and second, one of them is subject to phosphorylation by activated src-related PTKs. Phosphorylation on tyrosine in the cytoplasmic portion of Ig-α is discussed as a possible mechanism to couple the BCR to SH2 domain-carrying mols.

L3 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1993:601419 CAPLUS
DOCUMENT NUMBER: 119:201419
TITLE: Cloning of a human IgM autoantibody bearing a cross-reactive idiotype in a λ **expression vector**: a new approach to studying autoantibodies
AUTHOR(S): Dang, Howard; Lazaridis, Konstantinos; Talal, Norman; Fischbach, Michael; Sanz, Inaki
CORPORATE SOURCE: Health Sci. Cent., Univ. Texas, San Antonio, TX, USA
SOURCE: Clinical Immunology and Immunopathology (1993), 67(3, Pt. 1), 249-56
CODEN: CLIIAT; ISSN: 0090-1229
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The monoclonal antibody 4B4 is a human IgM,κ which expresses a cross-reactive lupus-associated idiotype and has anti-Sm binding activity. The authors find that the VL nucleotide sequence of 4B4, like the 4B4 VH region, is encoded by unmutated germline genes. The 4B4 VH and VL were cloned into the ImmunoZap λ **expression vector** to produce three recombinant Ig polypeptides. These recombinant polypeptides expressed, resp., either the 4B4 VH or VL alone or a VH/VL heterodimer. ELISA showed that the VH/VL heterodimer retained anti-Sm antibody activity. The 4B4 idiotype was found predominantly on the VH. This report describes: (i) a method for producing recombinant **immunoglobulin mols**. from an IgM-secreting B cell line and (ii) the ability of recombinant antibody fragments expressed in Escherichia coli to retain the structural and antigenic properties of the native mol.

L3 ANSWER 20 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1992:565006 CAPLUS
DOCUMENT NUMBER: 117:165006
TITLE: Novel vectors for the expression of antibody molecules using variable regions generated by polymerase chain reaction
AUTHOR(S): Coloma, M. Josefina; Hastings, Alice; Wims, Letitia A.; Morrison, Sherie L.
CORPORATE SOURCE: Mol. Biol. Inst., Univ. California, Los Angeles, CA, 90024, USA
SOURCE: Journal of Immunological Methods (1992), 152(1), 89-104
CODEN: JIMMBG; ISSN: 0022-1759
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A new family of vectors has been produced which facilitates the cloning and expression of Ig variable regions cloned by polymerase chain reaction (PCR). The vectors are designed to express the cloned variable regions joined to human constant regions and take advantage of priming in the leader sequence so that no amino acid changes will be introduced into the mature antibody mol. Both the heavy chain and light chain vectors utilize a murine VH promoter provided with an EcoRV restriction site so that the amplified variable regions can be directly cloned into a functional promoter. For the heavy chain an NheI restriction site has been generated at the first two amino acids of CH1 and the cloned leader and variable region are fused directly to the CH1 domain of the constant region. When the leader and variable regions of the light chain were fused directly to Cκ, no expression was observed Therefore the light chain **expression vector** was designed with a SalI restriction site for cloning into a splice junction 3' of the variable region; VL then is joined to Cκ by splicing. Both vectors direct the expression of functional, fully assembled **Ig mols**. with the expected mol. weight Use of redundant oligomers to prime the PCR permits the cloning and expression of recombinant antibodies without any prior information as to their sequence, and makes it possible to rapidly generate recombinant antibodies from any monoclonal antibody producing cell line.

L3 ANSWER 21 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:581013 CAPLUS
DOCUMENT NUMBER: 115:181013
TITLE: Cell surface expression of the short immunoglobulin μ chain (Dμ protein) in murine pre-B cells is differently regulated from that of the intact μ chain
AUTHOR(S): Tsubata, Takeshi; Tsubata, Rieko; Reth, Michael
CORPORATE SOURCE: Max-Planck-Inst. Immunbiol., Freiburg, D-7800, Germany
SOURCE: European Journal of Immunology (1991), 21(6), 1359-63
CODEN: EJIMAF; ISSN: 0014-2980
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Pre-B cells carrying DJH rearrangements in an appropriate reading frame produce a short μ protein consisting of a DJH and the Cμ& sequence (Dμ protein). A Dμ-producing Abelson-murine leukemia virus-transformed murine pre-B line, 300-19, was analyzed and Dμ proteins were expressed on the cell surface in association with surrogate L chain proteins (λ5 and VpreB). However, when an **expression vector** coding for the Dμ protein was introduced into the null pre-B P17-27, which produce λ5 and VpreB but no **Ig mols**., most of the cells did not express Dμ proteins on the cell surface although Dμ proteins were produced intracellularly. On the other hand, P17-27 brings intact μ chains on the cell surface, when a vector coding for the intact μ chain is introduced. Thus, cell surface expression of the Dμ protein has different requirements from that of the intact μ chain. A possible role of the VH protein encoded by germ-line VH transcripts is discussed.

L3 ANSWER 22 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:119929 CAPLUS
DOCUMENT NUMBER: 114:119929
TITLE: A chimeric IL-2/**Ig molecule** possesses the functional activity of both proteins
AUTHOR(S): Landolfi, Nicholas F.
CORPORATE SOURCE: Protein Des. Labs, Inc., Mountain View, CA, 94043, USA
SOURCE: Journal of Immunology (1991), 146(3), 915-19
CODEN: JOIMA3; ISSN: 0022-1767
DOCUMENT TYPE: Journal
LANGUAGE: English

AB An **expression vector** (pIL-2/IgG1) was constructed with the coding sequence of human IL-2 inserted upstream of the 4 exons (CH1, hinge, CH2, and CH3) that encode the human IgG1 H chain constant region. Introduction of this vector into a nonsecreting murine myeloma cell line resulted in the production of a chimeric mol. (IL-2/IgG1) consisting of IL-2 attached to the 3 Ig constant region domains. This mol. was secreted by the transfectant as a homodimer. Functional characterization revealed that the IL-2/IgG1 chimeric mol. exhibited the binding and proliferation-mediating activities of IL-2. On a per mol. basis, IL-2/IgG1 was indistinguishable from human rIL-2 in the ability to induce the proliferation of an IL-2-dependent T cell line. This chimeric mol. also possesses Ig effector function, in that it can mediate the specific lysis of IL-2R-pos. cells in the presence of complement. Thus, it is possible to maintain Ig effector function in mols. (immunoligands) in which the binding specificity is conferred not by Ig variable regions, but rather, by a ligand of choice.

L3 ANSWER 23 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1990:606115 CAPLUS
DOCUMENT NUMBER: 113:206115

TITLE: Production of murine V-human Cr1 chimeric anti-TAG72 antibody using V region cDNA amplified by PCR
AUTHOR(S): Xiang, Jianhua; Roder, John; Hozumi, Nobumichi
CORPORATE SOURCE: Samuel Lunenfeld Res. Inst., Mount Sinai Hosp., Toronto, ON, M5G 1X5, Can.
SOURCE: Molecular Immunology (1990), 27(8), 809-17
CODEN: MOIMD5; ISSN: 0161-5890
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A mouse/human chimeric B72.3-1-3 antibody was produced by construction of a novel **expression vector** mpSV2neo-EP1-V-Cr1. This vector contains the neo gene as a selection marker, the murine IgH chain promoter and enhancer, the murine V region cDNA containing mRNA splicing joint sequences, amplified and cloned by the PCR technique directly from the B72.3 hybridoma RNA, and the human genomic Cr1 region. The **expression vector** containing the murine/human chimeric IgH chain gene was transfected into heavy chain loss mutant cell line, B72.3M1. Chimeric B72.3-1-3 antibody was produced at 2 μmg/mL and retained full binding reactivity to TAG72 compared to the murine B72.3 parental antibody. Using this method, chimeric **Ig mols**. can be produced rapidly in comparison with the cDNA and genomic cloning techniques.

L3 ANSWER 24 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1988:148563 CAPLUS
DOCUMENT NUMBER: 108:148563
TITLE: Transfected plasmacytoma cells do not transport the membrane form of IgM to the cell surface
AUTHOR(S): Hombach, Joachim; Sablitzky, Fred; Rajewsky, Klaus; Reth, Michael
CORPORATE SOURCE: Inst. Genet., Univ. Cologne, Cologne, D-5000/41, Fed. Rep. Ger.
SOURCE: Journal of Experimental Medicine (1988), 167(2), 652-7
CODEN: JEMEAV; ISSN: 0022-1007
DOCUMENT TYPE: Journal
LANGUAGE: English

AB **Expression vectors** coding for membrane-bound IgM antibodies were introduced into myeloma and B lymphoma cells. Only the lymphoma, but not the myeloma, cells were able to express the antibodies on the cell surface, although in both cases, complete antibodies were assembled intracellularly. In myeloma cells, the **Ig mols**. did not reach the Golgi compartment. Thus, the intracellular transport of membrane-bound antibodies is controlled in the B cell lineages in a developmentally ordered fashion.